Operating the Meade LX-200

Notes

1. Always use the handset to move the scope. Do not release the ra or dec locks. There are four speeds available:
   SLEW (# 7 on the handset) is the fastest,
   FIND (#4) medium speed,
   CENTER (#1) for eyepiece adjustments, and
   GUIDE (#0) for long exposure image corrections.
   Press one of these buttons and a light will come on next to it. You can now use the direction keys (NESW) to move the telescope.
2. Be careful not to flip the north/south switch located under the power switch when turning the telescope on or off. This should always be in the north position.
3. Watch the handset cord to make sure it doesn't get wrapped around other cords and snag while the telescope moves.
4. If the lens becomes covered in dew, often mistaken for a focus problem, use the hair dryer on the telescope tube until the dew evaporates. Do not blow onto the lens directly.

Startup

- Power up the computer and camera as normal and start CCDOPS.
- Turn on the telescope by sliding the switch located on the upper right of the faceplate at the telescope base. A red light will come on.
- After focusing, center the telescope on a known bright star. And adjust the setting circle.
- You can use the telescope now by driving it with the handset as described in the notes above, or set up the automatic controls so it will drive itself to your object of choice.

Automatic Mode

- With the telescope centered on the known bright star, turn to page 31 in the manual. Find the star in the table and get its star number.

- Press the STAR key (#6 on the handset). A screen appears prompting you to enter the star number. Use the keypad to do so and press the ENTER button located on the top left of the handset. If you make a mistake, press the MODE key (top middle) and start again.
- A screen appears with the star's information. Make sure the star is still centered in the eyepiece, then press and hold the ENTER key. You will hear 2 quick beeps and the screen will change to say "coordinates matched: star (#)". This means the telescope knows where it is at and is ready to automatically drive itself.
- The telescope will drive to any of the 64,359 objects in its library which are above the horizon at the time of observation. All major planets, the moon, and the following catalogs: SAO, UGC, NGC, IC, GCVS, Messier, and the Meade star catalog are available to choose from. Some of these are listed in an index starting on page 36 of the manual.
- If you wish to access the Messier catalog, press the M (9) key. For SAO, Meade star catalog, GCVS, or planets, use the STAR (6) key. All other catalogs are under the CNGC (3) key.
- Pressing keys 6 or 3 gives you a choice of catalogs. To choose an object (say NGC 5194) press the corresponding catalog button (3 here) and you will hear 2 quick beeps. The screen will show the current catalog name and prompt you for the number. If the catalog is not the one you want (UGC or IC instead of NGC), press the ENTER button. This will open a menu of the available catalogs. The current catalog is checked on the right hand side and the selection arrow is shown on the left hand side. Use the PREV and NEXT keys on the bottom of the keypad to move the arrow. When the correct catalog (NGC) is selected, press the ENTER key. The check mark should now be next to your catalog. Now press the MODE key and the previous screen will appear.
- You should now see a screen showing your catalog name (NGC) and prompting you to enter the number (5194). Do so and press enter. As with the star alignment from before, an information screen on your object appears. To have the telescope drive to the object, press the GO TO button located on the top right of the keypad. You will hear a beep when the telescope has reached the object.

Shutdown

- Park the telescope in the same position as the others, facing the rear of the shed with the tube parallel to the floor.
- Untangle the handset cord if necessary and hang the handset on the bar below the camera.
- Turn off the telescope and replace the covers.
- Shut down everything else as normal.